

Accepted Manuscript

Learning by doing, endogenous discounting and economic development

Stéphane Bouché

PII: S0304-4068(17)30010-1

DOI: <http://dx.doi.org/10.1016/j.jmateco.2017.08.004>

Reference: MATECO 2178

To appear in: *Journal of Mathematical Economics*

Received date: 20 January 2017

Revised date: 17 August 2017

Accepted date: 25 August 2017



Please cite this article as: Bouché S., Learning by doing, endogenous discounting and economic development. *Journal of Mathematical Economics* (2017), <http://dx.doi.org/10.1016/j.jmateco.2017.08.004>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Learning by doing, endogenous discounting and economic development

Stéphane Bouché *

Universidade de Vigo, ECOBAS and RGEA

Abstract

In this paper, we focus on a growth model where the discount rate is decreasing in capital accumulation and endogenous growth is made possible through learning by doing. Knowledge accumulation being a by-product of gross investment. In such a model, the utility function has to be restricted to take positive values implying that the elasticity of marginal utility is lower than one. The presence of endogenous discounting generates a steady-state of stagnation which can be saddle-path stable or unstable depending on the marginal productivity of knowledge. In the case of long run growth, the fact that the elasticity of marginal utility is lower than one implies the existence of two asymptotic balanced growth paths. The one with the higher growth rate being a saddle point while the one with the lower growth rate not being a saddle point. We also study the optimal solution which is characterized by a unique balanced growth path. The policy consists as usual in subsidizing investment in order to internalize the externality.

Keywords: Endogenous growth, learning by doing, endogenous discounting, indeterminacy, poverty trap

JEL classification: D90, O11, O39, O41

*Correspondance address: Stéphane Bouché. Facultad de Ciencias Económicas y Empresariales. Universidade de Vigo. Campus as Lagoas-Marcosende. 36310 Vigo. Phone: +34986812535. Email: sbouche@uvigo.es

Download English Version:

<https://daneshyari.com/en/article/5101356>

Download Persian Version:

<https://daneshyari.com/article/5101356>

[Daneshyari.com](https://daneshyari.com)